

ABSTRACT OF DISCLOSURE

A structural reinforcement layer for use in a laminate for a vehicle headliner comprises at least one of carbon fibers and natural fibers. A thermoplastic binder may adhere the fibers to one another. A method for manufacturing a laminate comprising a the structural reinforcement layer comprises the steps of providing a core, providing a first reinforcement layer containing carbon fibers adjacent one of opposing sides of the core, providing adhesive layers on each of the opposing sides of the core, applying a barrier film and covering to the first reinforcement layer to the first reinforcement layer. Applying a scrim mat comprising a reinforcement layer, a barrier film and a scrim layer to the other of the opposing sides of the core to complete the laminate. According to a method for recycling a laminate, laminate material formed of composite materials including carbon fibers that have a melting and/or degradation point above the incineration point of the other composite materials is provided. The laminate is heated to a temperature below the melting and/or degradation point of the carbon fibers and above the incineration point of the other composite materials to reduce the other composite materials to ash.